

ABSTRACT

A semiconductor device manufacturing method comprises a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and  $\text{NH}_3$  flowing into the reaction container, and a second step of removing silicon nitride formed in the reaction container, with  $\text{NF}_3$  gas flowing into the reaction container.